

PLTW Gateway Medical Detectives 2021-2022 STEM Scale-Up Program

Grade Levels: 6-8, in school

Information Sessions: Thursday, Jan 21 3:30 https://tinyurl.com/pltw-iowastem **Website:** https://www.pltw.org/our-programs/pltw-gateway-curriculum#curriculum-10

Award Provides:

Access to Project Lead The Way's PLTW Gateway Medical Detectives curriculum and to all PLTW Gateway program features including:

- Connections with PLTW teachers both in Iowa and across the country through training and online forums
- Ongoing access to teacher resources and learning opportunities and 24/7 school and technical support
- Required software licenses
- Five days of Medical Detectives Core Training, unit curriculum and supplies and PLTW participation fee for one year

Additional Cost(s) to Awardee In 2021-2022:

None required but districts may choose to provide the educator a stipend for training.

Approximate Sustainability Cost After Award Period:

- Annual PLTW
 Participation Fee for
 PLTW Gateway (\$950)
- Annual cost of consumables (\$942.00 per section of the course offered)

Program Summary: Middle school is a time of exploration, a time when students are figuring out what they're passionate about today and how that relates to who they'll become tomorrow. PLTW Gateway sparks a joy of discovery and illuminates the range of paths and possibilities they can look forward to in high school and beyond. PLTW Gateway was developed for students in grades 6-8.

In the <u>Medical Detectives</u> 10-week unit, students play the role of real-life medical detectives as they collect and analyze medical data to diagnose disease. They solve medical mysteries by performing a brain dissection and conducting crime scene investigations. Students use tools such as the engineering design process, an engineering notebook and electrophoresis to solve a murder. Your students can learn how creative thinking and problem solving can change the world.

Students solve medical mysteries through hands-on projects and labs, measure and interpret vital signs, examine nervous system structure and function, investigate disease outbreaks and explore how a breakdown within the human body can lead to dysfunction. The curriculum is available in English and Spanish.

Below are related course documents:

Course Outline
Course Standards

For more information, please contact Vic Dreier at vdreier@pltw.org.

What is Required to Implement the Program:

- Educator(s) must participate and successfully complete PLTW's Gateway Medical Detectives Core Training.
- Awarded applicants will be expected to implement the Medical Detectives unit during the 2021-2022 school year.
- An agreement and participation form indicating participation in PLTW Gateway Medical Detectives signed by the building administrator is required before receiving training or materials.
- Participation in the STEM Council Scale-Up Educator Survey.

Professional Development:

In order to implement PLTW Gateway Medical Detectives, teachers will need to participate in and successfully complete PLTW's Medical Detectives Core Training.

PLTW Core Training immerses teachers in a hands-on, collaborative learning environment that challenges them to look at their classrooms in a new way. Teachers take on the role of a student, engage in in-depth exploration of PLTW coursework and gain invaluable experience to take back to their classrooms.

Duration: 5 days **Date:** July 26-30, 2021 **Location:** virtual